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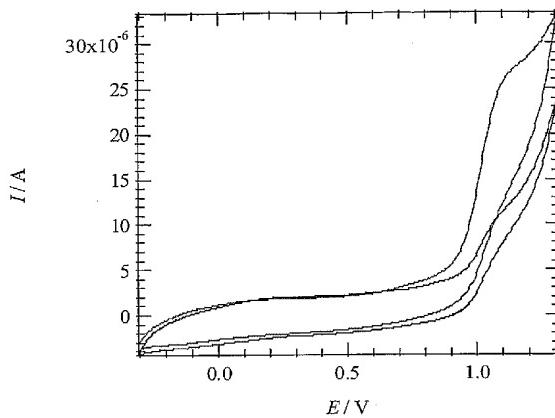
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(54) Title: NUCLEIC ACID COMPOSITE MATERIALS MADE SENSORS FOR THE ANALYSIS OF NUCLEIC ACID MODIFYING FACTORS



Cyclic voltammetry of a PBS solution (buffer) with an electrode made out of an ink incorporating salmon testes DNA and Ruthenium (2,2'-bipyridine)₃²⁺. From top to bottom, a) DNA catalytic oxidation signal, and b) similar but decreased signal due to prior DNA oxidation.

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(57) Abstract: The present invention relates to a method for fabricating a nucleic acid composite material, and to a sensor fabricated with this composite material. This composite material sensor can be used as the working electrode in a conventional electrochemical system, for the measurement of any nucleic acid modifying factors. Protective and/or damaging effects of oxidants/anti-oxidants present in the solution can then be analyzed based on their action on nucleic acids.